

WHAT IS CLAIMED IS:

1. A method for inspecting a display device substrate having a plurality of signal wirings and a plurality of electrostatic discharge damage (ESD) protection devices, the method comprising steps of:

shorting the ESD protection devices to form a current path on each of the signal wirings;  
supplying a current to the signal wirings; and  
determining a defectiveness of at least one of the signal wirings depending on the current flowing on the signal wirings.

2. The method according to claim 1, wherein in the shorting step, the ESD protection devices are shorted with a conductive shorting bar.

3. The method according to claim 1, wherein the step of supplying the current to the signal wirings includes:

supplying a high voltage through a first shorting wiring connected to the signal wirings; and  
supplying a low voltage through a second shorting wiring connected to the ESD protection devices.

4. The method according to claim 1, wherein in the shoring step, the

display device substrate is a TFT array substrate of a liquid crystal display.

5. A method for inspecting a display device substrate having a plurality of signal wirings and a plurality of electrostatic discharge damage (ESD) protection devices, the method comprising steps of:

supplying a voltage to a control terminal of each of the ESD protection devices to turn on the ESD protection devices and thereby form a current path on each of the signal wirings;

supplying a current to the signal wirings; and

determining a defectiveness of at least one of the signal wirings depending on the current flowing on the signal wirings.

6. The method according to claim 5, wherein in the voltage supplying step, the voltage is supplied through a dummy shorting wiring connected to the control terminal of each of the ESD protection devices.

7. The method according to claim 6, wherein the control terminal of each of the ESD protection devices includes a gate terminal of a transistor.

8. The method according to claim 5, wherein in the voltage supplying step, the voltage is supplied through a shorting wiring connected to the

control terminal of each of the ESD protection devices and to input/output terminals of the ESD protection devices.

9. The method according to claim 8, wherein in the voltage supplying step, the control terminal of each of the ESD protection devices includes a gate terminal of a transistor, and the input/output terminal of each of the ESD protection devices includes a source/drain terminal of the corresponding transistor.

10. The method according to claim 5, wherein in the voltage applying step, the display device substrate is a TFT array substrate of a liquid crystal display.

11. An apparatus for inspecting a display device substrate having a plurality of signal wirings and a plurality of electrostatic discharge damage (ESD) protection devices, the apparatus comprising:  
a conductive shorting bar to short the ESD protection devices;  
a power supply to supply a current to the signal wirings; and  
a detection circuit to determine a defectiveness of at least one of the signal wirings depending on the current flowing on the signal wirings.

12. The apparatus according to claim 11, wherein the conductive shorting bar is provided in a jig.

13. The apparatus according to claim 11, further comprising:  
a first shorting wiring connected to the signal wirings; and  
a second shorting wiring connected to the ESD protection devices,  
wherein the power supply supplies a high voltage to the signal wirings through the first shorting wiring, and a low voltage to the ESD protection devices through the second shorting wiring.

14. The apparatus according to claim 11, wherein the display device substrate is a TFT array substrate of a liquid crystal display.

15. An apparatus for inspecting a display device substrate having a plurality of signal wirings and a plurality of electrostatic discharge damage (ESD) protection devices, the apparatus comprising:  
a control circuit to supply a voltage to a control terminal of each of the ESD protection devices to turn on the ESD protection devices, so as to form a current path on each of the signal wirings;  
a power supply to supply a current to the signal wirings; and  
a detection circuit to determine a defectiveness of at least one of the

signal wirings depending on the current flowing on the signal wirings.

16. The apparatus according to claim 15, further comprising:  
a dummy shorting wiring through which the control circuit supplies the voltage to the control terminal of each of the ESD protection devices.
17. The apparatus according to claim 16, wherein the dummy shorting wiring is formed on the display device substrate.
18. The apparatus according to claim 15, wherein the control terminal of each of the ESD protection devices includes a gate terminal of a transistor.
19. The apparatus according to claim 15, further comprising:  
a shorting wiring connected to the control terminal of each of the ESD protection devices and to an input/output terminal of each of the ESD protection devices,  
wherein the control circuit supplies the voltage to the control terminals of the ESD protection devices through the shorting wiring.
20. The apparatus according to claim 19, wherein the shorting wiring

is formed on the display device substrate.

21. The apparatus according to claim 19, wherein the control terminal of each of the ESD protection devices includes a gate terminal of a transistor, and the input/output terminal of each of the ESD protection devices includes a source/drain terminal of the corresponding transistor.

22. The apparatus according to claim 15, wherein the display device substrate is a TFT array substrate of a liquid crystal display.